

CONDITIONAL USE SITE PLAN

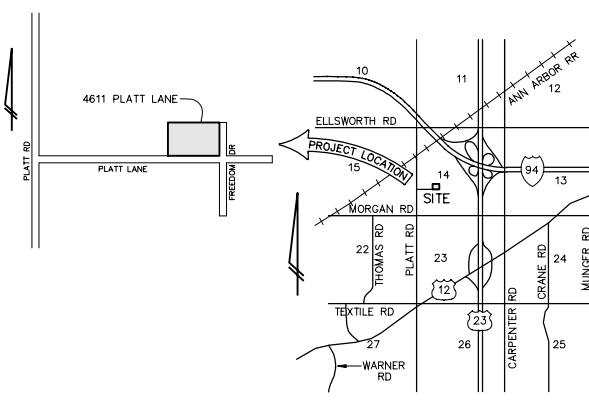
4611 PLATT LANE

CONSTRUCTION NOTES:

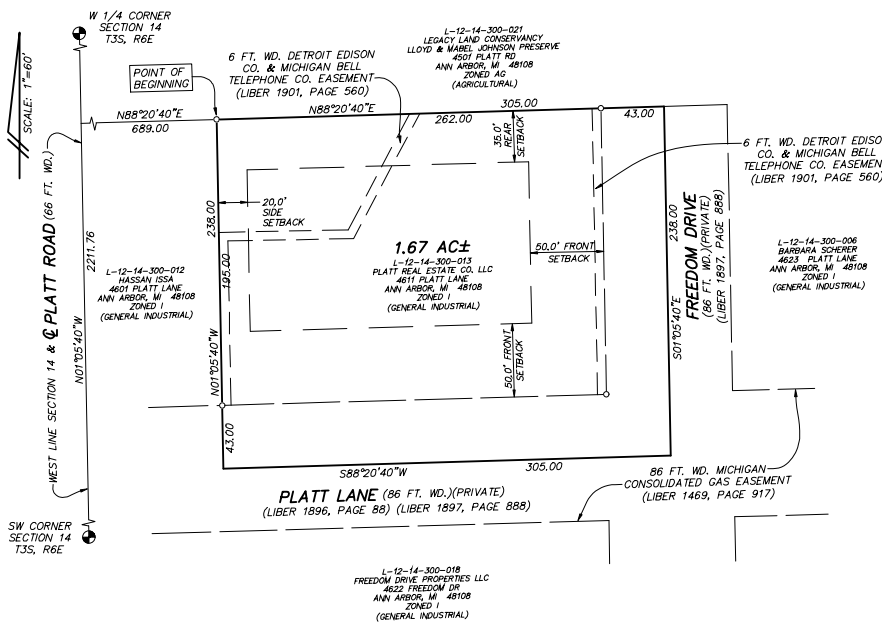
1. ALL WORK SHALL CONFORM TO PITTSFELD TOWNSHIP AND THE W.C.R.C. SPECIFICATIONS.
2. ALL WORK NOT COVERED BY THE ABOVE WILL BE IN ACCORDANCE WITH THE 2017 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, PROPOSED SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
3. IT IS ESSENTIAL THAT THE CONTRACTOR FAMILIARIZE HIMSELF WITH THE SITE PRIOR TO SUBMITTING PROPOSAL.
4. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT AFFECT THIS JOB.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO AND THE REPAIR OF ANY EXISTING UTILITY LINE IN THE CONSTRUCTION ZONE.
6. AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-482-7171) FOR UTILITY LOCATIONS.
7. LOCATION OF EXISTING UTILITIES WERE TAKEN FROM EXISTING PLANS. LOCATIONS WERE FIELD VERIFIED WHERE POSSIBLE.
8. CONTRACTOR MUST OBTAIN AN EROSION CONTROL PERMIT FROM THE WASHTENAW COUNTY WATER RESOURCES COMMISSIONER AND PITTSFELD TOWNSHIP PRIOR TO BEGINNING EARTH MOVING. CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES PER THIS APPROVED PLAN.
10. ANY CONDITIONS EXISTING ON THE SITE THAT ARE NOT CONSISTENT WITH THE PLANS OR SOIL EROSION SEDIMENTATION PERMIT WILL RESULT IN A STOP WORK ORDER AND REVOCATION OF THE SOIL EROSION SEDIMENTATION CONTROL PERMIT.
11. ALL FILL MATERIAL MUST BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES AND COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT.
12. THE CONTRACTOR WILL BE REQUIRED TO PROOF ROLL (WITH A HEAVY RUBBER TIRE VEHICLE) ALL FILL AREAS PRIOR TO PLACING ADDITIONAL FILL AND ALL CUT AREAS UPON COMPLETION OF THE CUT AND PRIOR TO PLACING SUBBASE MATERIAL. IF THE PROOF ROLLING INDICATES UNSTABLE AREAS THE UNSTABLE MATERIAL MUST BE REMOVED AND REPLACED WITH MATERIAL MATCHING THE ADJACENT SOILS TO THE ELEVATION OF THE SUB-GRADE.
13. THE FINISHED SUBGRADE MUST BE GRADED WITHIN A TOLERANCE OF ± 0.1 FEET OF DESIGN GRADE COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT TO A DEPTH OF 9 INCHES AND APPROVED BY THE OWNERS REPRESENTATIVE PRIOR TO PLACEMENT OF THE SUBBASE.
14. THE FINISHED SUBBASE MUST BE GRADED WITHIN A TOLERANCE OF $\pm 3/4$ INCH OF THE DESIGN GRADE AND APPROVED BY THE OWNERS REPRESENTATIVE PRIOR TO PLACEMENT OF THE AGGREGATE BASE. FINE GRADING PRIOR TO THE PLACEMENT OF THE AGGREGATE BASE MATERIAL SHALL BE INCLUDED IN THE COST OF FURNISHING AND PLACING THE SUBBASE.
15. THE WORK OF CONSTRUCTING AN AGGREGATE BASE COURSE SHALL CONFORM TO MDOT SPECIFICATION 302 EXCEPT THAT FINE GRADING PRIOR TO PLACEMENT OF THE BITUMINOUS SURFACING SHALL BE INCLUDED IN THE COST OF FURNISHING AND PLACING THE AGGREGATE BASE.
16. ALL PAVEMENT GRADES SHOWN REPRESENT TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
17. THERE ARE TO BE NO STOCKPILES OF TOPSOIL ONSITE. ANY EXCAVATED TOPSOIL IS TO BE REMOVED PROMPTLY BY THE CONTRACTOR.

PARCEL ID # L-12-14-300-013
A PART OF THE SOUTHWEST 1/4
SECTION 14, T3S, R6E,
PITTSFELD TOWNSHIP, WASHTENAW
COUNTY, MICHIGAN

FOR:
PLATT REAL ESTATE CO.
2502 E. MICHIGAN AVE.,
YPSILANTI, MI. 48197



VICINITY MAP
(NO SCALE)



Potter
ARCHITECTURAL SERVICES

630 Terrace Lane Phone: (734) 480-0866
Ypsilanti, MI 48198 Mobile: (734) 678-0802

Email: bpotter@potterarch.com
http://www.potterarch.com

OWNER/APPLICANT
ERIC NEMETH
PLATT REAL ESTATE CO.
2502 E MICHIGAN AVE.
YPSILANTI, MI 48197

TENANT
KENZY HOLDINGS
46188 ROYAL DR.
CHESTERFIELD TWP, MI 48051

CIVIL ENGINEERING
WASHTENAW ENGINEERING COMPANY
3526 W. LIBERTY RD., SUITE 400
ANN ARBOR, MI 48106
OFFICE: 734-761-8800

WASHTENAW ENGINEERING

CIVIL ENGINEERS • PLANNERS
SURVEYORS • LANDSCAPE ARCHITECTS

P.O. BOX 1128
3526 WEST LIBERTY RD., SUITE 400, ANN ARBOR, MICHIGAN 48106
TEL. 734-761-8800 FAX: 734-761-9530
E-MAIL: wesco@engco.com

washtenawengineering.com

SITE DATA TABLE

ZONING	EXISTING 1 (GENERAL INDUSTRIAL)	REQUIRED 1 (GENERAL INDUSTRIAL)	PROPOSED 1 (GENERAL INDUSTRIAL)
GROSS LOT AREA	72,590 SF	-	72,590 SF
NET LOT AREA	51,090 SF	43,560 SF	51,090 SF
WIDTH	262 FT	150 FT	262 FT
GROUND FLOOR AREA	7,729 SF±		7,729 SF±
MEZZANINE FLOOR AREA	751 SF±		751 SF±
TOTAL FLOOR AREA	8,480 SF±		8,480 SF±
TOTAL IMPERVIOUS AREA	22,666 SF±		23,180 SF±
FLOOR AREA RATIO	17%	60% MAX	17%
MAX. LOT COVERAGE			
GROSS	15.7%	30%	15.7%
IMPERVIOUS	44.4%	60%	46.6%
SETBACKS			
FRONT	50 FT	50 FT	50 FT
REAR	83.4 FT	35 FT	83.4 FT
SIDE	70.4 FT	20 FT	78.7 FT
NUMBER OF BUILDINGS	1		1
MAX HEIGHT	(2) STORY	(2) STORY	(2) STORY
MAX FLOOR AREA	25 FT	45 FT	25 FT
PARKING	17.5%	60%	17.5%
	24 TOTAL 0 REGULAR 0 BARRIER FREE		19 TOTAL 17 REGULAR 0 COMPACT 2 BARRIER FREE (1 VAN)

PARKING CALCULATIONS:
WAREHOUSING = 6,790 SQFT / 1,500 SQFT = 5 SPACES
INDUSTRIAL = 1,313 SQFT / 550 SQFT = 3 SPACES
RETAIL (DISTRIBUTION) = 377 SQFT / 250 SQFT = 2 SPACES
EMPLOYEES = 5 PEOPLE / 1 SPACE = 5 SPACES
TOTAL REQUIRED = 5 + 3 + 2 + 5 = 15 SPACES

SHEET TITLE	SHEET NO.
COVER	1
EXISTING CONDITIONS	2
REMOVAL	3
SITE PLAN	4
UTILITY, GRADING, SOIL EROSION & SEDIMENTATION CONTROL PLAN	5
DETAILS	6
LANDSCAPE PLAN	7
TURNING TEMPLATE FIRE TRUCK, GARBAGE TRUCK AND WB-50 TRUCK	8
ARCHITECTURAL PLANS	
FLOOR PLAN, GENERAL NOTES	A1
EXTERIOR ELEVATIONS	A2
PITTSFELD TOWNSHIP PLANNING, ENGINEERING AND CODE ENFORCEMENT SPECIFICATIONS AND STANDARD DETAILS	
SOIL EROSION DETAILS AND NOTES	11
STORM SEWER DETAILS AND SPECIFICATIONS	12
STORM SEWER DETAILS AND SPECIFICATIONS	13

PREPARED BY: JOSEPH K. MAYNARD P.E., MICH No. 52559

NOTE: REFER TO PROJECT GEOTECHNICAL REPORT FOR THE REMOVAL OF EXISTING POOR QUALITY FILL AND ORGANIC SOILS AND REPLACEMENT WITH ENGINEERED FILL TYPICAL FOR THE ENTIRE BUILDING FOOTPRINT PLUS 10 FEET OUTWARD.

REVISED CUP PLAN: 10-6-2022
REVISED: 9-10-2022
REVISED: 7-11-2022
ORIGINAL: 5-26-2022

PATIENT STATION C.S.P.A.#22-25

4611 PLATT LANE - CONDITIONAL USE SITE PLAN

THE OWNER SHALL NOT USE OR AUTHORIZE ANY OTHER PERSON TO USE THE DRAWINGS, SPECIFICATIONS, ELECTRONIC DATA AND OTHER INSTRUMENTS OF SERVICE ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THE PROJECT BY OTHERS, WITHOUT THE WRITTEN CONSENT OF WASHTENAW ENGINEERING COMPANY, INC. ANY SUCH USE OR AUTHORIZATION WITHOUT THE WRITTEN CONSENT OF WASHTENAW ENGINEERING COMPANY, INC. SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO WASHTENAW ENGINEERING COMPANY, INC. FOR ANY AND ALL DAMAGES, LOSSES, AND EXPENSES, INCLUDING BUT NOT LIMITED TO ATTORNEY'S FEES, ARISING OUT OF AND/OR CAUSED BY SUCH USE OR AUTHORIZATION.

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THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING RECORDS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

THIS SHEET IS AT FULL SCALE WHEN PRINTED AT 24"x36"

BENCHMARK BM1=TOP OF WELL AT NORTHWEST CORNER OF PROPERTY, ELEV=853.19 (NAVD 88).
BM2=FINISH FLOOR AT WEST ENTRANCE OF BUILDING, ELEV=851.09 (NAVD 88).
BM3=CULVERT WEST INVERT AT WEST DRIVE, ELEV=844.34 (NAVD 88).

REVISIONS 2022-07-11 PER OWNER, 2022-09-12 PER REVIEW, 2022-10-06 REVISED CUP PLAN

SCALE 40
0 10 20
SCALE: 1"=20'

PREPARED BY
THOMAS L. SUTHERLAND P.S., MICH No. 24620

811
Know what's below.
Call before you dig.

SECTION 14 TOWN 3 SOUTH RANGE 6 EAST
PITTSFIELD TOWNSHIP
WASHTENAW COUNTY • MICHIGAN
DATE 5-26-2022 JOB NO. 32079, 32719, 32950
DWG NO. 719-1000 FIELD BOOK 601
FILE NO. 10237

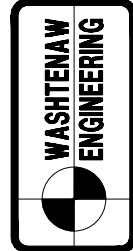
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4611 PLATT LANE
L-12-14-300-013

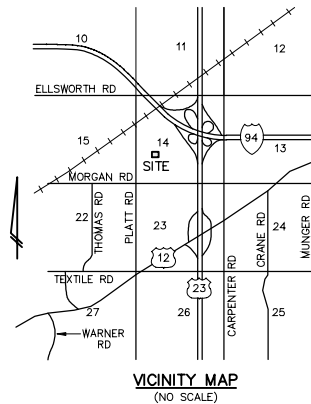
EXISTING CONDITIONS

CLIENT

PLATT REAL ESTATE CO.
2502 E. MICHIGAN AVE.,
YPSILANTI, MI 48197



CIVIL ENGINEERS
PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS
3526 W. LIBERTY RD
SUITE 400
ANN ARBOR, MI 48103
FAX: 734-761-9530
WASHTENAWENGINEERING.COM



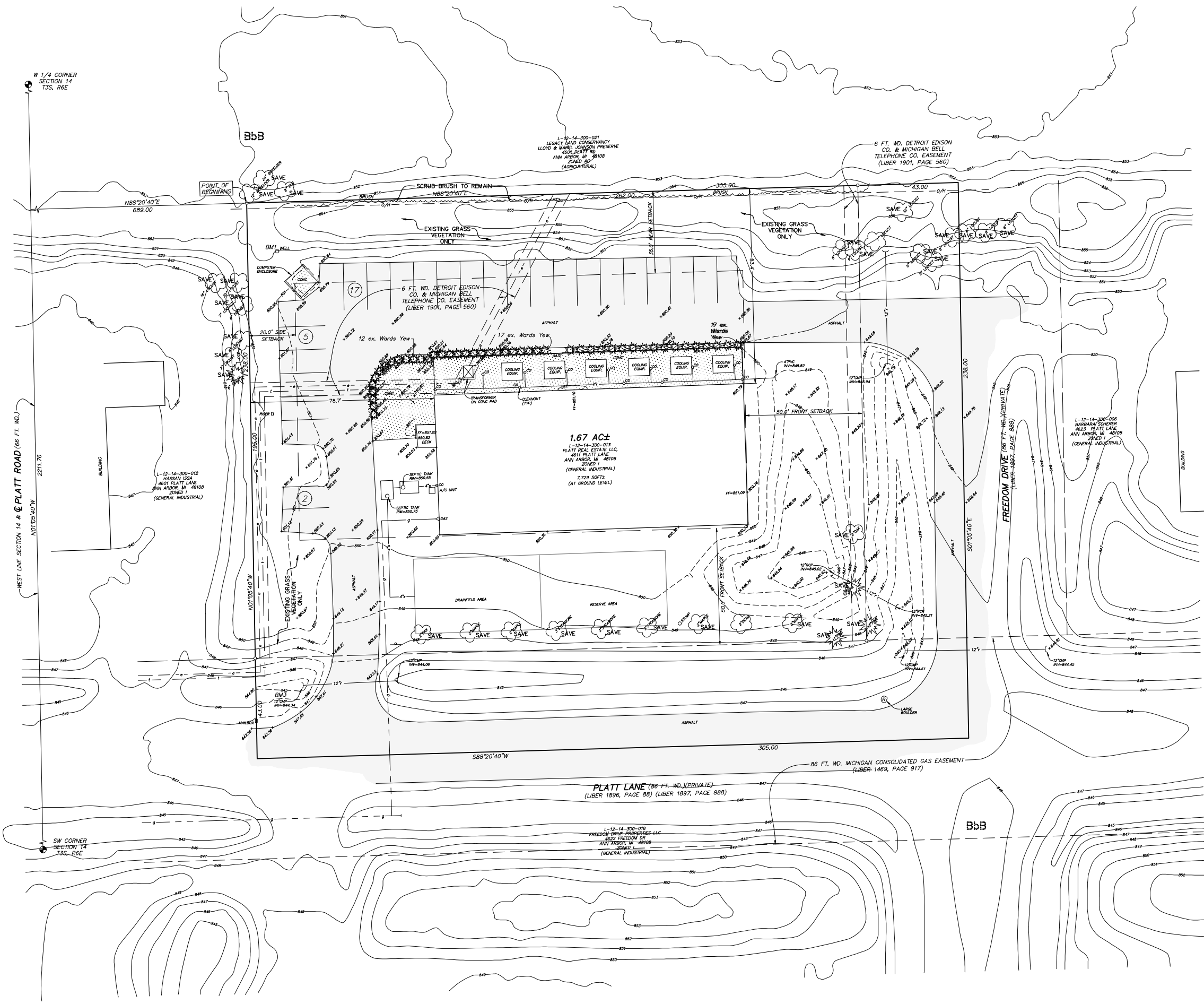
DESCRIPTION (BY OTHERS)

Commencing at a point on the West line of Section 14, T3S, R6E, Pittsfield Township, Washtenaw County, Michigan, said point being located North 01°05'40" West 2211.76 feet from the Southwest corner of Section 14 and running thence North 88°20'40" East 689.00 feet to a POINT OF BEGINNING; thence continuing North 88°20'40" East 305.00 feet; thence South 01°05'40" East 238.00 feet; thence South 88°20'40" West 305.00 feet; thence North 01°05'40" West 238.00 feet to the POINT OF BEGINNING.

WASHTENAW COUNTY SOIL SURVEY CLASSIFICATION
BbbB - BLOUNT LOAM, 2 TO 6 PERCENT SLOPES
• • • • • - SOILS BOUNDARY

EXISTING LEGEND
EWASHTENAW.ORG CONTOURS
--- 881 --- = EXISTING 5 FT. CONTOUR
--- 885 --- = EXISTING 1 FT. CONTOUR
FIELDWORK GENERATED CONTOURS
--- 881 --- = EXISTING 1 FT. CONTOUR
--- 885 --- = EXISTING 5 FT. CONTOUR
• = SPOT ELEV.
• = UTILITY POLE
• = WELL
• = SIGN
• = TREE/BUSH
• = MANHOLE/CLEANOUT
• = END SECTION
--- = FENCE
--- = CONCRETE
--- = ASPHALT
--- = EXISTING STORM
--- = EXISTING SANITARY
--- = EXISTING WATER
--- = EXISTING GAS
--- = EXISTING ELECTRIC
--- = EXISTING TELEPHONE
--- = EXISTING CABLE
--- = EXISTING R.O.W.

NOTE:
• NO HERITAGE TREES
• NO STEEP SLOPES



THE OWNER SHALL NOT USE OR AUTHORIZE ANY OTHER PERSON TO USE THE DRAWINGS, SPECIFICATIONS, TELEPHONIC DATA AND OTHER INSTRUMENTS OF SERVICE ON ANY OTHER PROJECT, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THE PROJECT BY ANY OTHER PERSON. THE OWNER SHALL NOT USE OR AUTHORIZE ANY OTHER PERSON TO USE THE DRAWINGS, SPECIFICATIONS, TELEPHONIC DATA AND OTHER INSTRUMENTS OF SERVICE ON ANY OTHER PROJECT, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THE PROJECT BY ANY OTHER PERSON.

SECTION 14 TOWN 3 SOUTH RANGE 6 EAST

PITTSFIELD TOWNSHIP

WASHTENAW COUNTY • MICHIGAN

DATE 5-26-2022 JOB NO. 32079, 32719, 32950


SHEET 3 DWG NO. 719-site

FIELD BOOK 601

FILE NO. 10237

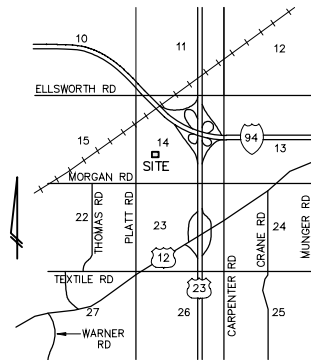
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PROJECT



**WASHTENAW
ENGINEERING**

CIVIL ENGINEERS
PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS
3526 W. LIBERTY RD
SUITE 400
ANN ARBOR, MI 48103
TEL. 734-761-8800
FAX. 734-761-9530
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WASHTENAW COUNTY SOIL SURVEY CLASSIFICATION
Bb3 - BLOUNT LOAM, 2 TO 6 PERCENT SLOPES
 - SOILS BOUNDARY
 SOILS ARE BASED ON USDA SOIL SURVEY
 OF WASHTENAW COUNTY.

EXISTING LEGEND

EWASHTENAW ORG. CONTOURS

_____ 881' = EXISTING 5 FT. CONTOUR
_____ 885' = EXISTING 1 FT. CONTOUR

FIELDWORK GENERATED CONTOURS

_____ 881' = EXISTING 1 FT. CONTOUR
_____ 885' = EXISTING 5 FT. CONTOUR

_____ 890.50' = SPOT ELEV.

_____ = UTILITY POLE

○ = WELL

— = SIGN

☁ = TREE/BUSH

○ = MANHOLE/CLEANOUT

_____ = END SECTION

_____ = FENCE

_____ = CONCRETE

_____ = ASPHALT

_____ r = EXISTING STORM

_____ s = EXISTING SANITARY

_____ w = EXISTING WATER

_____ g = EXISTING GAS

_____ e = EXISTING ELECTRIC

_____ t = EXISTING TELEPHONE

_____ c = EXISTING CABLE

_____ c = EXISTING R.O.W.

THE OWNER SHALL NOT USE OR AUTHORIZE ANY OTHER PERSON TO USE THE DRAWINGS, SPECIFICATIONS, ELECTRONIC DATA AND OTHER INSTRUMENTS OF SERVICE ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THE PROJECT BY ANY PERSON OTHER THAN THE OWNER.

SECTION 14 TOWN 3 SOUTH RANGE 6 EAST

PITTSFIELD TOWNSHIP

WASHTENAW COUNTY • MICHIGAN

DATE: 3-15-2021

JOB NO. 32079, 32719, 32950

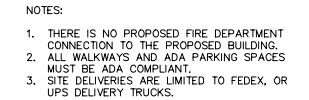
DWG NO. 719-site

FIELD BOOK 601

FILE NO. 10237

4

SHEET

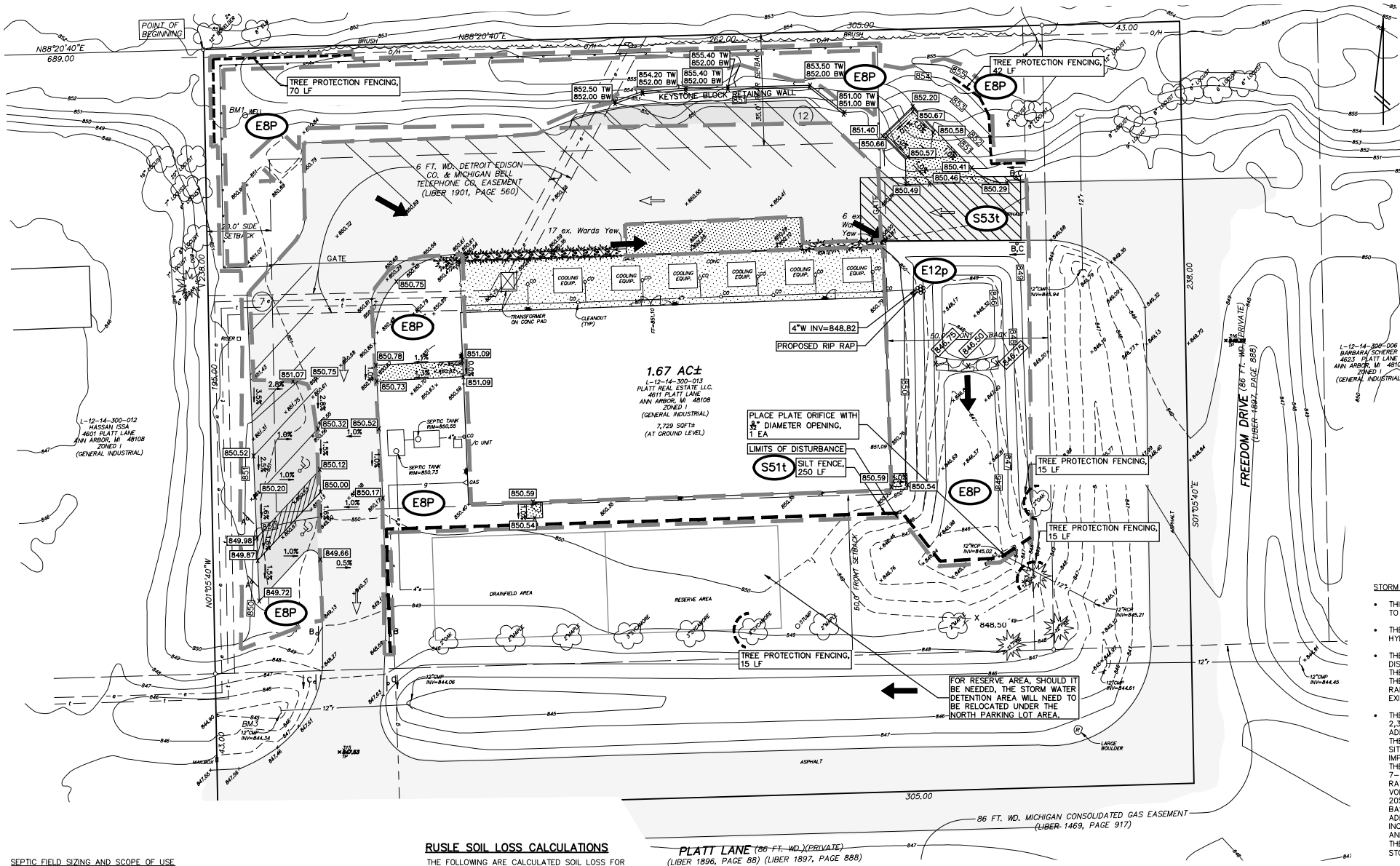


CT
4611 PLATT LANE
L-12-14-300-013

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING RECORDS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

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SEPTIC FIELD SIZING AND SCOPE OF USE

		PROPOSED BUILDING							WEEKLY TOTAL
		Gallons per day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Factory/warehouse	5	175.0	175.0	175.0	175.0	175.0	0.0	0.0	875
Employees 1st shift	35	175.0	175.0	175.0	175.0	175.0	0.0	0.0	875
Employees 2nd shift	5	175.0	175.0	175.0	175.0	175.0	0.0	0.0	875
Employees 3rd shift	5	175.0	175.0	175.0	175.0	175.0	0.0	0.0	875
Daily Total		525.0	525.0	525.0	525.0	525.0	0.0	0.0	
PROPOSED SANITARY FLOW RATES									
Application rate = 0.50 GAL/SFT									
Discharge rate = 0.25 GAL/DAY									
Required field size = 525.0 / 0.25 = 2,100 SFT									

EXISTING FIELD SIZE IS 1,700 SFT.
NO CHANGE IS PROPOSED TO THE EXISTING SANITARY SYSTEM

RUSLE SOIL LOSS CALCULATIONS

THE FOLLOWING ARE CALCULATED SOIL LOSS FOR THE CONSTRUCTION SITE.
SITE INFORMATION:

COUNTY: WASHTENAW
CONSTRUCTION SITE: 001
SITE ID: BLOUNT (BbB)
SLOPE: 2%
SLOPE LENGTH: 100 FT.
MULCH TYPE: STRAW/HAY
MULCH RATE: 1.0 (TONS/ACRE)
ACREAGE: 1.67 ACRE(S)
CALCULATED SOIL LOSS: R=100
K=0.43
LS=0.28
C=0.20
P=1
T=3 (TONS/ACRE/YEAR)
A=2.41 (TONS/ACRE/YEAR)
POTENTIAL SOIL LOSS (TOTAL): 4.02 (TONS/YEAR)

TOLERABLE SOIL LOSS:
CALCULATED SOIL LOSS:
POTENTIAL SOIL LOSS (TOTAL):

MAINTENANCE SCHEDULE DURING CONSTRUCTION

Tasks	Storm System	Storm Water Management System	Scheduled Frequency
Inspect for Sediment Accumulation	X	X	Weekly
Remove sediment accumulation	X	X	As Needed & prior to Acceptance
Inspect for floatables and debris	X	X	Quarterly
Remove floatables and debris	X	X	As Needed & prior to Acceptance
Inspect for erosion	X	X	Weekly
Re-establish permanent vegetation on eroded slopes	X	X	As Needed & prior to Acceptance
Replacement of stone	X	X	As Needed
Mowing	X	X	As Needed
Inspect during wet weather & after major storms	X	X	As Needed & prior to Acceptance
Repair Storm Damage to System and Erosion Control	X	X	As Needed
During construction, it is the developer's responsibility to perform the maintenance.			
(1) As needed means when sediment has accumulated to a maximum of one foot immediately following construction, the developer will have the storm water management system inspected by an engineer to verify grades of the detention and infiltration areas and make recommendations for any necessary sediment removal.			

MAINTENANCE SCHEDULE AFTER CONSTRUCTION

Tasks	Storm System	Storm Water Management System	Scheduled Frequency
Inspect for Sediment Accumulation	X	X	Annually
Remove sediment accumulation	X	X	Every 2 years As Needed
Inspect for floatables and debris	X	X	Annually
Remove floatables and debris	X	X	As Needed
Inspect for erosion	X	X	Annually
Re-establish permanent vegetation on eroded slopes	X	X	As Needed
Replacement of stone	X	X	As Needed
Mowing	X	X	As Needed
Inspect stormwater system components during wet weather and compare to as-built plans by professional engineer	X	X	Annually
Repair Storm Damage to System and Permanent Erosion Control	X	X	As Needed
Keep records on size of all maintenance, inspections, actions and costs	X	X	As Needed
Following construction, it will be the responsibility of Platt Real Estate Co. to perform the maintenance.			
(1) As needed means when sediment has accumulated to a maximum of one foot.			
Platt Real Estate Co. is required to pay for all maintenance activities on a continuing basis.			

ONGOING ANNUAL COSTS FOR MAINTENANCE OF STORM WATER MANAGEMENT SYSTEM

Item No.	Description	Annual Cost
1	Annual inspection for sediment accumulation	\$100.00
2	Removal of sediment accumulation every 2 years as needed	\$500.00
3	Inspect for floatables and debris annually and after major storms	\$100.00
4	Removal of floatables and debris annually and after major storms	\$150.00
5	Inspect for erosion annually and after major storms	\$150.00
6	Re-establish permanent vegetation on eroded slopes as needed	\$350.00
7	Replacement of stone as needed	\$100.00
8	Mowing	\$400.00
9	Inspect structural elements during wet weather and compare to as-built plans every 2 years	\$150.00
10	Make structural adjustments or replacements as determined by inspection as needed	\$400.00
11	Have a professional engineer carry out emergency inspections, upon identification of severe problems	\$200.00
12	Records Maintenance	\$100.00
Estimated Annual Maintenance Cost		\$2,700.00

SOIL EROSION CONTROL NOTES:

- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWNSHIP OF PITTSTOWN AND DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. WHEN NECESSARY, REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
- EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS, WHICH INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION; SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THIS SITE.
- THE OWNER SHALL OBTAIN OR CAUSE HIS CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS, PAY ALL FEES AND POST ALL BONDS TO EACH AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER EROSION CONTROL MEASURES ON THIS PROJECT.
- THE CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THIS PLAN. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES AND OTHER CHANGES HAVE BEEN ACCOMPLISHED.
- THE CONTRACTOR IS TO PROTECT AS MUCH EXISTING VEGETATION AS POSSIBLE.
- ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS FROM THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR AND/OR BUILDER. ALL MUD, DIRT AND DEBRIS TRACKED OR SPILLED ONTO PAVED SURFACES WITHIN THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR AND/OR BUILDER.
- ANY SOIL EROSION CONTROL MEASURES DAMAGED BY THEIR CONTRACTOR'S OPERATION SHALL BE REPLACED THE SAME DAY.
- DISTURBED AREA FOR THIS PROJECT IS 15,037 SFT (0.35± ACRES).
- ESTIMATED COST OF THE PERMANENT AND TEMPORARY EROSION CONTROL DEVICES IS \$ 2,700.00
- ESTIMATED COST TO PROTECT SITE FROM EROSION SHOULD CONSTRUCTION DISCONTINUE IS \$ 2,000.00
- ANY TREES DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE MITIGATED PER THE ZONING ORDINANCE REQUIREMENTS.

STORM WATER NARRATIVE

- THIS SITE IS FULLY DEVELOPED. PROPOSED SITE IMPROVEMENTS INCLUDE MINOR CHANGES TO THE PARKING LOT.
- THE EXISTING SOILS ARE BLOUNT LOAM, 2 TO 6 PERCENT SLOPES, WHICH IS PART OF THE HYDROLOGIC SOIL GROUP C. THESE SOILS ARE TYPICALLY NOT GOOD FOR INFILTRATION.
- THE EXISTING STORM WATER IS COLLECTED IN A DETENTION BASIN ON-SITE AND DISCHARGES VIA A PIPE WITH ORIFICE CONTROL TO THE PLATT LANE ROAD DITCH. FROM THERE IT TRAVELS WEST TO PLATT ROAD, THEN SOUTH TO E. MORGAN RD, THEN EAST TO THE KOCH AND WASHTENAW RIVERS. THIS IS PART OF THE SWIFT RUN CREEK SHED AND THE RAISIN RIVER BASIN. NO KNOWN INSTANCES OF FLOODING HAVE OCCURRED AND THE EXISTING BASIN APPEARS TO BE WORKING PROPERLY.
- THE SITE HAS AN EXISTING IMPERVIOUS AREA OF 22,666 SFT. THERE IS REMOVAL OF 2,350 SFT OF IMPERVIOUS SURFACE TO 20,316 SFT. FOR THE DISTURBED AREA AN ADDITIONAL 2,864 SFT IS BEING ADDED FOR A TOTAL IMPERVIOUS AREA OF 23,180 SFT. THE TOTAL SITE HAS AN AREA OF 1.67 ACRES. THE DISTURBED AREA FOR THE ENTIRE SITE 0.35 ACRES FOR A 21% DISTURBED AREA. PER THE TOWNSHIP THE ADDITIONAL IMPERVIOUS AREA NEEDS TO BE ACCOUNTED FOR IN THE EXISTING STORM WATER BASIN. THE ORIGINAL CALCULATIONS FROM SITE PLANS BY AMERICAN ENGINEERING CO. DATED 7-20-1983 HAVE A REQUIRED RETENTION VOLUME OF 2,179 CU. FT. AND A OUTFLOW RATE OF 0.457 CFS. WCRC CALCULATIONS FOR STORM WATER REQUIRES AN ADDITIONAL VOLUME OF 1,379 CU. FT. OF VOLUME FOR A 100-YEAR STORM EVENT WHICH INCLUDES A 20% PENALTY FOR NOT BEING ABLE TO PROVIDE INFILTRATION ON-SITE. THE EXISTING BASIN HAS A STORAGE VOLUME OF 6,178 BASED ON EXISTING GRADING WHICH IS ADEQUATE FOR THE EXISTING SITE. THE PROPOSED REGRADING OF THE BASIN WILL INCREASE THE VOLUME TO 9,318 CU. FT. FOR AN INCREASE IN VOLUME OF 3,140 CU. FT. AND PROVIDE FOR A SEDIMENTATION BASIN. THE SEDIMENTATION BASIN VOLUME IS 5X OF THE 100-YEAR EVENT WHICH EQUATES TO (2266+1379)*0.05 = 182 CFT REQUIRED STORAGE. 367 CFT OF STORAGE FOR SEDIMENT IS PROVIDED.

ELEVATION	AREA(SQ. FT.)	VOLUME(CU. FT.)
849	3,223	0
848	2,515	1,949
847	1,383	850
846	318	156
845.02	0	0
TOTAL VOLUME 6,178 CU. FT.		

ELEVATION	AREA(SQ. FT.)	VOLUME(CU. FT.)	CUMULATIVE VOLUME (CU.FT.)
849	4,514	3,995	9,318
848	3,476	2,986	5,323
847	4,996	1,798	2,337
846	1,100	539	539
845.02	0	0	0
TOTAL VOLUME 9,318 CU. FT.			

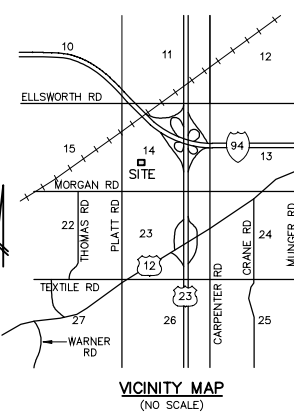
ELEVATION	AREA(SQ. FT.)	VOLUME(CU. FT.)
846.5	480	211
846	364	156
845.5	262	0
TOTAL VOLUME 367 CU. FT.		

- THE EXISTING OUTLET HAS A 12" DIAMETER PIPE WITH AN ORIFICE PLATE. THE ORIFICE PLATE OPENING HAS AN AREA OF 9.36 SQ. IN. THE EXISTING OUTFLOW IS 0.457 CFS. THE CURRENT ALLOWABLE OUTFLOW PER WCRC STANDARDS IS Qall = 0.15 * TOTAL TRIBUTARY AREA = 0.15 * 1.67 ACRES = 0.2505 CFS
- FOR THE PROPOSED OUTFLOW USING ORIFICE UNDER HEAD
Vtot = 3,558 CU. FT.
STORAGE ELEVATION 100YR = (3,558 - 2,337) / (5,323 - 2,337) + 847 = 847.41
HEAD H = 847.41 - 845.02 = 2.39 FT
ORIFICE PLATE OPENING AREA REQUIRED TO DETAIN STORM WATER 36 HRS
T = 36 HRS
Q = V/T = 3558/(36HRS * 3600 SEC/HR) = 0.0275 CFS
A = Q/(0.62*(2+GH)^0.5) = 0.0275/(0.62*(2+32.2+39)^0.5) = 0.0036 SFT = 0.51 SQ. IN.
REQUIRED ORIFICE PLATE SIZE D = [A/(2+3.14)]^0.5 = (0.51/6.28)^0.5 = 0.28" (1/4") DIAMETER.
- REPLACE EXISTING ORIFICE PLATE WITH 1/4" DIAMETER OPENING.

CONSTRUCTION SEQUENCE

- TEMPORARY EROSION CONTROL MEASURES INSTALLED.
- GRAVEL CONSTRUCTION ACCESS DRIVE INSTALLED.
- LAND CLEARED OR EXCAVATION STARTED.
- DETENTION/SEDIMENT BASIN INSTALLED.
- UTILITIES INSTALLED.
- ROAD/PAVEMENT CONSTRUCTION.
- BUILDING ADDITION CONSTRUCTION.
- FINAL GRADING/SEEDING.
- SEDIMENT BASIN CLEANED.
- PERMANENT CONTROL MEASURES INSTALLED AND FUNCTIONING.
- REMOVE TEMPORARY CONTROL MEASURES.

NOTE:
REFER TO PROJECT GEOTECHNICAL REPORT FOR THE REMOVAL OF EXISTING POOR QUALITY FILL AND ORGANIC SOILS AND REPLACEMENT WITH ENGINEERED FILL TYPICAL FOR THE ENTIRE BUILDING FOOTPRINT PLUS 10 FEET OUTWARD.



EXISTING LEGEND

EWASHTENAW.ORG CONTOURS
--- = EXISTING 5 FT. CONTOUR
--- = EXISTING 1 FT. CONTOUR
--- = EXISTING 1 FT. CONTOUR
--- = EXISTING 5 FT. CONTOUR
--- = SPOT ELEV.
--- = UTILITY POLE
--- = WELL
--- = SIGN
--- = TREE/BUSH
--- = MANHOLE/CLEANOUT
--- = END SECTION
--- = FENCE
--- = CONCRETE
--- = ASPHALT
--- = EXISTING STORM
--- = EXISTING SANITARY
--- = EXISTING WATER
--- = EXISTING GAS
--- = EXISTING ELECTRIC
--- = EXISTING TELEPHONE
--- = EXISTING CABLE
--- = EXISTING R.O.W.

PROPOSED LEGEND

--- = BUILDING
--- = FENCE
--- = ASPHALT
--- = CONCRETE
--- = BARRIER FREE PARKING
--- = PAYMENT MARKING
--- = SIGN-HANDICAP
--- = SIGN-NO PARKING-FIRE LANE
--- = SIGN-ONE-WAY
--- = SIGN-MOUNTED LIGHT
--- = DUMPSTER ENCLOSURE
--- = PROPOSED 1FT. CONTOUR
--- = PROPOSED 5FT. CONTOUR
--- = SPOT GRADE
--- = PAVEMENT PERCENT SLOPE

NOTES:
1. THERE IS NO PROPOSED FIRE DEPARTMENT CONNECTION TO THE PROPOSED BUILDING.



Know what's below.
Call before you dig.

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET S-E-S-C KEYING SYSTEM

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
E8	PERMANENT SEEDING		Stabilization method utilized on sites where earth change has been completed (final grading attained).
S51	SILT FENCE		Use adjacent to critical areas, to prevent sediment laden sheet flow from entering these areas.
E12	RIPRAP		Use along shorelines, waterways, or where concentrated flows occur. Slows velocity, reduces sediment load, and reduces erosion.
S53	STABILIZED CONSTRUCTION ACCESS		Used at every point where construction traffic enters or leaves a construction site.

--- = SILT FENCE
--- = LIMITS OF CONSTRUCTION
--- = TREE PROTECTION FENCING
t = TEMPORARY
P = PERMANENT
--- = FLOW ARROW

WASHTENAW COUNTY SOIL SURVEY CLASSIFICATION

BbB - BLOUNT LOAM, 2 TO 6 PERCENT SLOPES

--- = SOILS BOUNDARY

SOILS ARE BASED ON USDA SOIL SURVEY OF WASHTENAW COUNTY.

DESCRIPTION (BY OTHERS)

Commencing at a point on the West line of Section 14, T3S, R6E, Pittsfield Township, Washtenaw County, Michigan, said point being located North 01°05'40" West 2211.76 feet from the Southwest corner of Section 14 and running thence North 88°20'40" East 689.00 feet to a POINT OF BEGINNING, thence continuing North 88°20'40" East 305.00 feet thence South 01°05'40" East 238.00 feet; thence South 88°20'40" West 305.00 feet; thence North 01°05'40" West 238.00 feet to the POINT OF BEGINNING.

NOTE:
1. ALL SIDEWALKS MUST BE ADA COMPLIANT.
2. CONTRACTOR TO CONFIRM ADA COMPLIANCE AFTER CONSTRUCTION.

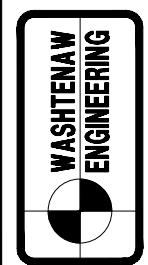
BENCHMARK BM1=TOP OF WELL AT NORTHWEST CORNER OF PROPERTY, ELEV=853.15 (NAVD 88)
BM2=FINISH FLOOR AT WEST ENTRANCE OF BUILDING, ELEV=851.09 (NAVD 88)
BM3=CULVERT WEST INVERT AT WEST DRIVE, ELEV=844.34 (NAVD 88)

REVISIONS 2022-07-11 PER OWNER, 2022-09-12 PER REVIEW, 2022-10-06 REVISED CUP PLAN

SCALE 40
0 10 20
SCALE: 1"=20'

PREPARED BY JOSEPH K. MAYNARD P.E., MICH No. 52559

CIVIL ENGINEERS
PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS
3526 W. LIBERTY RD
SUITE 400
ANN ARBOR, MI 48103
FAX: 734-761-9530
WASHTENAWENGINEERING.COM



PLATT REAL ESTATE CO.
2502 E. MICHIGAN AVE.
P/PSILANT, MI 48197

UTILITY, GRADING, SOIL EROSION & SEDIMENTATION CONTROL PLAN

4611 PLATT LANE
L-12-14-300-013

SECTION 14 TOWN 3 SOUTH RANGE 6 EAST
PITTSFIELD TOWNSHIP
WASHTENAW COUNTY • MICHIGAN
JOB NO. 32079-32719-32950
DATE 5-26-2022
DWG NO. 719-grd
FIELD BOOK 601
FILE NO. 10237
5 SHEET

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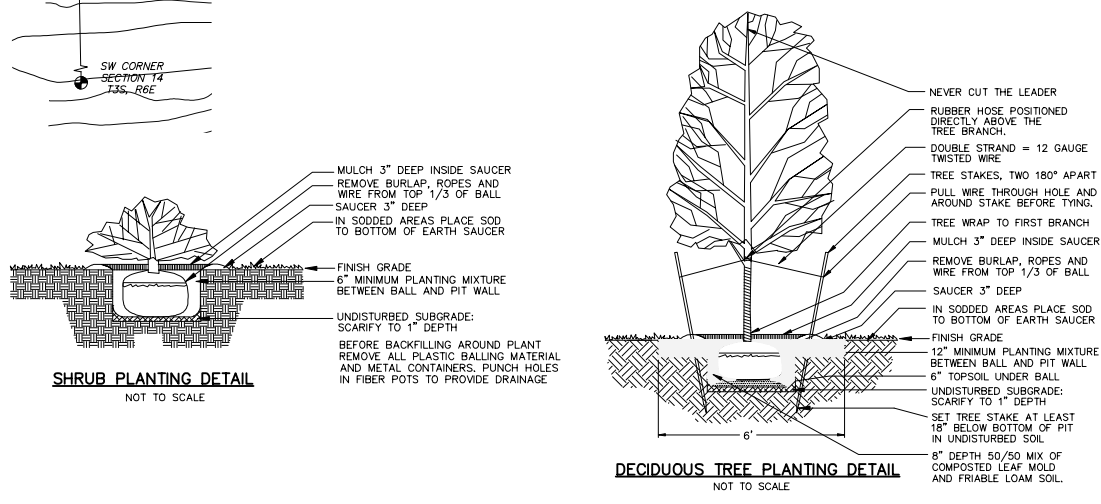
**PROPOSED WATERMAIN,
STORM SEWER &
SANITARY SEWER BEDDING**
(OUTSIDE THE INFLUENCE
OF ROAD CORRIDOR)

**PROPOSED WATERMAIN,
STORM SEWER &
SANITARY SEWER BEDDING**
(IN ROAD CORRIDOR
(NOT TO SCALE))



6

THESE INSTRUMENTS OF SERVICE ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THE PROJECT BY OTHERS SO LONG AS WESTWAM ENGINEERING COMPANY (WEC) IS NOT ALLOWED TO BE IN DEFAULT UNDER THIS AGREEMENT. THE USE WITHOUT WEC'S PROFESSIONAL INVOLVEMENT WILL BE AT THE OWNER'S SOLE RISK AND WITHOUT LIABILITY TO WEC. THE OWNER SHALL INDEMNIFY AND HOLD HARMLESS WEC, WEC'S CONSULTANTS AND AGENTS AND EMPLOYEES OF ANY THEM FROM AND AGAINST CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING BUT NOT LIMITED TO ATTORNEYS' FEES ARISING OUT OF



LANDSCAPE REQUIREMENTS				REQUIRED	EXISTING	PROPOSED	
GREENBELT	543 LF	- 1 TREE PER 30 LF	18	18	6		
PERIMETER PARKING	22 LF	- 1 TREE PER 30 LF	1		1		
LOT SCREENING	22 LF	- 1 SHRUB PER 30 LF	7		7		Evergreen
INTERIOR PARKING LOT LANDSCAPE	19 SPACES	- 1 TREE PER 14	2		2		
CENTRAL SITE LANDSCAPING			20%		78.7%		
TRASH ENCLOSURE			SHRUBBERY		9		
EQUIPMENT SCREENING			SHRUBBERY	21	0		Domes
ENTRY/FOUNDATION (ADDITIONAL)			NOT REQ'D	0	1 TREE, 9 SHRUBS		
<u>PLANT LIST</u>							
TREES							
Qty.	Sym.	Botanical	Common	Size	Comment		
4	ACE	<i>Acer rubrum</i>	RED MAPLE	2.5" CAL.	B & B		REPLACEMENT
9	ARB	<i>Thuja Plicata</i>	GIANT WESTERN ARBORVITAE	7"	B & B		NEW PLANTS
5	SYC	<i>Platanus acerifolia</i>	PLANE TREE	2.5" CAL.	B & B		
1	MAG	<i>Magnolia Stellata</i>	STAR MAGNOLIA	2.5" CAL.	B & B		NEW PLANTS
SHRUBS (RELOCATED)							
Qty.	Sym.	Botanical	Common	Size	Comment		
24	YEW	<i>Taxus x media "Wardii"</i>	WARD'S YEW	24"			RELOCATED FROM ONSITE
20	HIC	<i>Hic taxus hicksi</i>	HICKS' YEW	24"			CONTAINER
9	HYD	<i>Hydrangea Arborescens</i>	STAR ANABELLE HYDRANGEA	24"			CONTAINER
PERENNIALS							
Qty.	Sym.	Botanical	Common	Size	Comment		
35	HOS	<i>Hosta elegans</i>	HOSTA	2 GAL.			CONTAINER

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